SERVICE MANUAL

SANYO

STEREO TURNTABLE

TP 1400

(EUROPE)

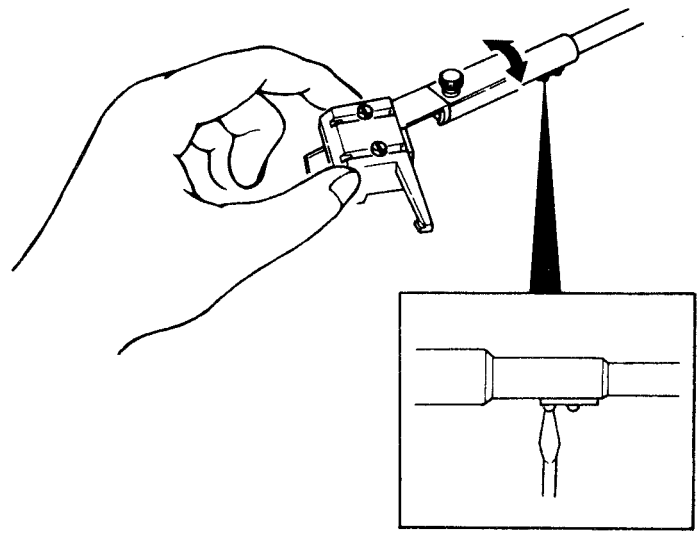
SPECIFICATIONS

Motor	DC FG servo motor
Drive system	Belt drive / Full auto
Speed	33-1/3 and 45 rpm
Speed deviation	± 3.0%
Wow and flutter	0.05% (WRMS)
Rumble	−70dB (DIN B spec)
Turntable platter	306 mm (12")
Tone arm	Static-balance Straight type
Tracking error	±1.5°
Overhang	15 mm
Cartridge	Magnetic stereo cartridge: VM type No. AT3601
Stylus	0.6 mil diamond stylus No. ATN3601
Stylus pressure	1.5 – 2.5 g
Frequency response	20 – 20,000 Hz
Channel separation	20 dB
Power source	AC: 220V, 50 Hz
Power consumption	6.5W
Dimensions (Approx.)	420(W) x 370(D) x 126(H) mm (16-1/2" x 14-1/2" x 5")
Weight (Approx.)	4 kg (9 lbs.)

* Specifications and design are subject to change without notice.

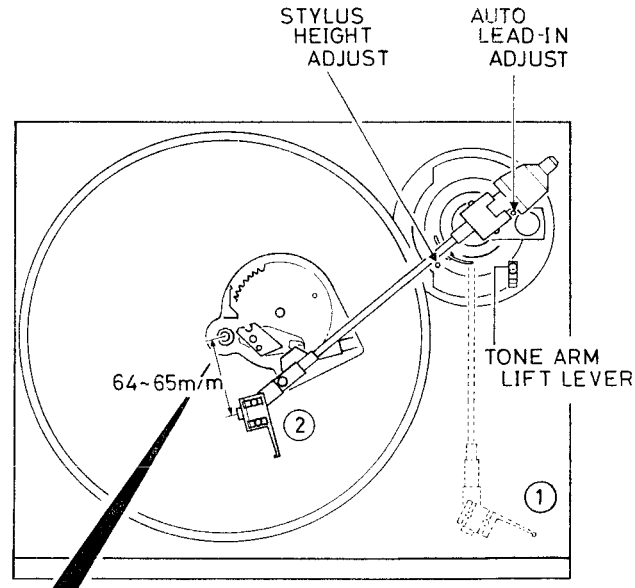
ADJUSTMENT OF HEADSHELL

The headshell attached to the tonearm should not be inclined either to the right or to the left. If necessary, loosen the two screws on the bottom of the tubular arm and adjust the headshell. Be sure that the stylus is normal to the record surface.



ADJUSTMENT OF AUTO-RETURN

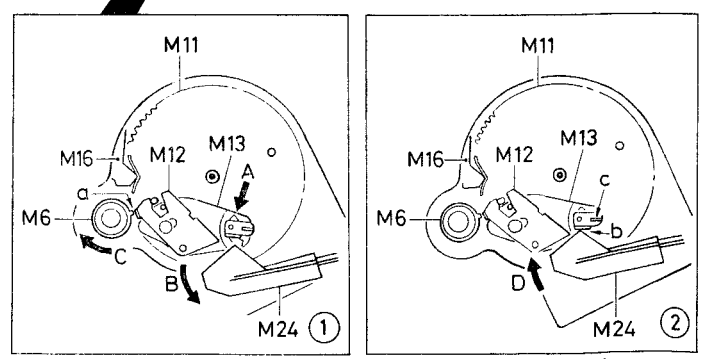
Remove the turntable to set the tone arm in the reset position (1). Under this state, move the gear so that the tip of lever M16 intermeshes with the withdrawn part of cam for main gear. Besides, lower trip lever M13 and trip lever M24 pushed toward the arrow marks A and B, respectively. Turn pipe assy. M6 toward the arrow mark C to set so that the convex part of pinion and the tip of claw for the egagement lever M12 contact each other (arrow mark a). Next, move the tone arm (toward arrow mark D). When the distance between the center shaft of turntable and the needle tip becomes 64 thru 65 mm (2), insert a blade screwdriver into part C, and adjust by turning it clockwise or counterclockwise so that the tip of trip lever M24 begins to contact with lower trip lever M13 (arrow mark b). Finally put on the turntable, and check the performance of auto-return.



ADJUSTMENT OF AUTO. LEAD–IN

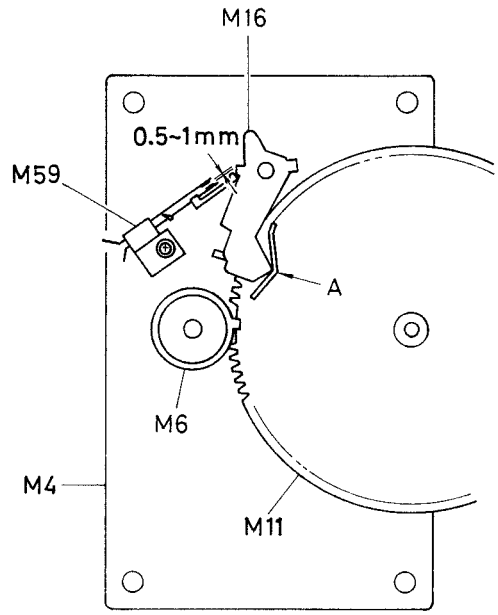
Place a record disk on the turntable, and depress the START/STOP switch to check the dropping position of needle tip.

Should the needle tip not drop nicely onto the lead-in groove of record disk, insert a screwdriver into the "AUTO. LEAD–IN ADJUST" hole, and turn it appropriately to adjust the dropping position of needle tip.



ADJUSTMENT OF LEAF SWITCH

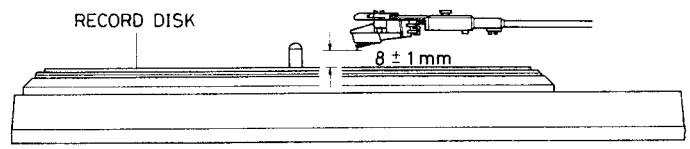
Fix leaf switch M59 so that its inter-contact distance will become 0.5 ~ 1 mm when the tip of lever M16 intermeshes with the withdrawn part of cam area (arrow A) of main gear M11.



ADJUSTMENT OF STYLUS HEIGHT

Setting the record disk in place, raise the tonearm lift lever.

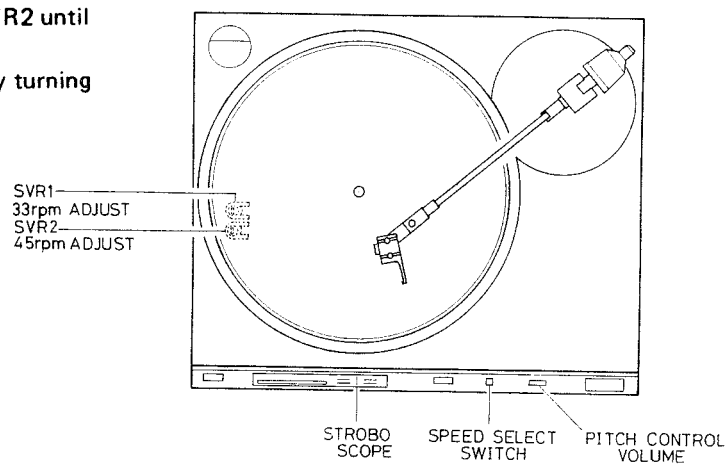
Bring the tonearm to above the disk, and insert a screwdriver into the "stylus height adjust" hole (see drawing for ADJUSTMENT OF AUTO-RETURN) and turn it right or left until the distance between the disk and stylus becomes 8 ± 1mm.



ADJUSTMENT OF TURNTABLE SPEED

Setting the pitch control in the middle position, place the speed select switch in the 45 rpm position. Insert a screwdriver from the bottom of deck panel and turn SVR2 until the stroboscope pattern appears dead.

Similarly, change to 33 rpm position, and adjust by turning SVR1.



PARTS LIST

Ref. No.	Part No.	Description	Q'ty
PACKING & ACCESSORIES			
	141-6-133T-47900	Individual Carton	1
	141-6-144T-85500	Foam Plastic Case, Right	1
	141-6-144T-85600	Foam Plastic Case, Left	1
	141-6-317T-41900	Pad	1
	141-6-317T-06700	Pad	1
	141-6-410T-95200	Instruction Manual	1
	141-6-231T-15250	Inner Polye Cover, AC Cord	1
	141-6-231T-10100	Inner Polye Cover, Cartridge	3
	141-6-231T-35400	Inner Polye Cover, Turntable	1
	141-2-135T-87001	Cover	1
	141-6-317T-60500	Pad, Set	1
	141-6-235T-60500	Inner Polye Lamina Cover, Set	1
	141-6-317T-69500	Pad, Set	1
CABINET & CHASSIS			
1	141-0-121T-18705	Deck Panel Ass'y	1
2	141-0-194T-01702	Dust Cover Ass'y	1
3	141-2-125T-30203	Bottom Lid	1
4	141-0-174T-11900	Stand Ass'y	4
5	141-2-445T-29000	Rubber Cushion	4
6	141-2-118T-02800	Turn Table	1
7	141-2-247T-09601	Sheet	1
8	141-2-873T-00900	Rest	1
9	141-2-873T-00700	Rest	1
10	141-2-352T-52500	Spacer, 45 Adapter	1
11	141-2-445T-26600	Rubber Cushion	2
12	141-2-251T-07200	Hinge	2
13	141-2-122T-49602	Front Panel	1
14	141-2-247T-19200	Sheet, Front panel	1
15	141-2-247T-19100	Sheet, START/STOP BUTTON	1
16	141-2-445T-29800	Rubber Cushion, START/STOP BUTTON	1
17	141-2-447T-00801	Cushion	2
18	141-2-163T-80632	Rotary Knob	1
19	141-2-163T-85100	Rotary Knob	1
20	141-2-246T-95400	Sheet	1
21	141-2-742T-08901	Lever	1
22	141-2-855T-86000	Spring Coil	1
23	141-2-683T-26300	Ring	1
24	141-2-131T-42200	Clear Window	1
25	141-2-210T-49900	Bracket, Mirror	1
26	141-2-863T-01300	Mirror	1
27	141-2-156T-33401	Knob, Power Switch	1
28	141-2-210T-50000	Bracket, Button	3
29	141-2-852T-90800	Spring Wire	1
30	141-2-310T-89500	Bracket, Power Switch	1
31	141-2-210T-50100	Bracket	3
32	141-2-161T-98401	Push Button	1
33	141-2-160T-30901	Push Button, 33/45	1
34	141-2-210T-49800	Bracket, Push Switch	2
35	141-2-310T-89600	Bracket, Switch	2
36	141-2-742T-75100	Lever	1
37	141-2-852T-87000	Spring Wire	1
38	141-2-855T-99900	Spring Coil	1
39	141-2-855T-87500	Spring Coil	1
40	141-2-852T-86900	Spring Wir, 33/45	1
41	141-2-445T-29900	Rubber Cushion	1
42	141-2-671T-06300	Cum, Refter	1
43	141-2-742T-67100	Lever, Refter	1
44	141-2-156T-30400	Knob, Refter	1
45	141-2-853T-71500	Spring Plate, Refter	1
46	141-2-855T-82000	Spring Coil	1
47	141-2-421T-33700	Special Screw	2
48	141-2-445T-05001	Cushion	2
49	141-2-855T-87500	Spring Coil, Main Slide	1
50	141-2-445T-28600	Rubber Cushion, Motor	3
51	141-2-421T-38800	Special Screw, Motor	3
52	141-2-461T-48400	Pipe	1
FIXING PARTS			
Y 1		Pan. Hd. Tapping Screw w/Washer, 2 x 8mm	1
Y 2		Pan. Hd. Tapping Screw w/Washer, 2.6 x 8mm	1

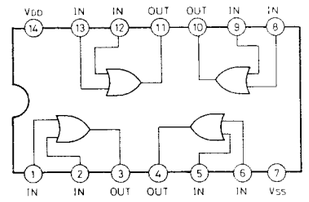
Ref. No.	Part No.	Description	Q'ty
FIXING PARTS			
Y 3		Pan. Hd. Tapping Screw w/Washer, 3 x 6mm	6
Y 4		Pan. Hd. Tapping Screw w/Washer, 3 x 8mm	10
Y 5		Pan. Hd. Tapping Screw w/Washer, 3 x 10mm	32
Y 6		Pan. Hd. Tapping Screw w/Washer, 3 x 12mm	5
Y 7		Pan. Hd. Tapping Screw w/Washer, 3 x 14mm	1
Y 8		Pan. Hd. Tapping Screw w/Washer, 3 x 18mm	1
Y 9		Pan. Hd.Tapping Screw 2.6 x 6mm	1
Y10		Pan. Hd. Tapping Screw 2.6 x 12mm	1
Y11		Pan. Hd. Tapping Screw 3 x 8mm	5
Y12		Pan. Hd. Tapping Screw 3 x 10mm	6
Y13		Pan. Hd. Tapping Screw 3 x 14mm	1
Y14		Pan. Hd. Tapping Screw 3 x 18mm	1
Y15		Flat Hd. Screw 2.6 x 4mm	1
Y16		Flat Hd. Screw 3 x 5mm	2
Y17		Binding Hd. Tapping Screw 3 x 8mm	1
Y18		Pan. Hd. Screw w/Spring Washer, 3 x 6mm	6
Y19		Pan. Hd. Forming Screw 3 x 6mm	2
Y20		Hexagon Socket Set Screw 4 x 6mm	2
Y21		Set Screw 2 x 4mm	1
Y22		Square Nut 4mm	1
Y23		Hexagon Nut 4mm	1
Y24		Hexagon Nut 4mm	1
Y25		Washer 3 x 13 x 1t	1
Y26		Washer 6 x 13 x 1t	4
Y27		Washer 3 x 13 x 1t	5
Y28	141-2-453T-30902	Washer 7.2 x 11 x 0.13t	1
Y29	141-2-453T-30301	Washer 3.1 x 5.4 x 0.25	4
Y30	123-2-453R-10500	Plastic Washer	1
Y31	141-2-453T-30802	Washer 6.2 x 9.5 x 0.50	1
Y32	141-2-453T-33700	Washer 4.5 x 7 x 0.25t	1
Y33	141-2-453T-64200	Washer	1
ELECTRICAL PARTS			
71	4-300T-68400	Power Transformer	1
72	4-243T-84973	Power Cord	1
73	4-243T-20800	Lead Cord, Output	1
74(S2)	4-231T-61900	Switch	1
75	4-238T-69500	Switch, Repeat	1
76	141-2-382T-07000	Terminal	1
77	4-243T-28000	Lead Cord	1
	141-2-464T-20600	Fixer	11
88	141-2-472T-01201	Lug	2
CONTROL P. C. B. ASS'Y			
78	141-4-280T-06500	P.C.B. Ass'y, Control	1
SVR1, 2	4-222T-71173	Semi-Variable Resistor 2K ohm	2
	4-240T-11200	Socket, 3p	1
	4-240T-11272	Socket, 5p	1
	4-240T-11274	Socket, 7p	1
	4-234T-01771	Fuse, 400mA	1
	141-2-381T-04200	Bracket Fuse	1
IC2, 3, 4, 6		IC LC4001B	4
IC5		IC LC4011B	1
IC1		IC LC4071B	1
Q11,12, 13, 14, 15, 17, 18		Transistor 2SC536 AUD	7
Q16		Transistor 2SD545	1

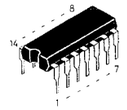
PARTS LIST & IC BLOCK DIAGRAMS

Ref. No.	Part No.	Description	Q'ty
CONTROL P. C. B. ASS'Y			
Q19		Transistor 2SA608	1
Q1		Transistor 2SD330	1
D11,13		Diode DS442 X	2
D14		Diode DS135 E	1
D1, 2, 3, 4		Diode DS135 E	4
D5		Zener Diode GZA13 X	1
D15		Zener Diode GZA9.1 Z	1
	CAPACITORS		
C11,12, 13		Ceramic 0.022μF +80—20% 50V	3
C14,15		Ceramic 0.047μF +80—20% 50V	2
C16,17		Electrolytic 10μF 16V	2
C18		Electrolytic 1μF 16V	1
C19		Electrolytic 47μF 16V	1
C20		Electrolytic 33μF 16V	1
C21		Electrolytic 2.2μF 16V	1
C3,4,5, 6		Ceramic 0.01μF +80—20% 50V	4
C7		Electrolytic 1000μF 25V	1
C8		Electrolytic 10μF 16V	1
C9		Electrolytic 470μF 16V	1
	RESISTORS All Resistors are Carbon T-type ±5% ¼W, unless otherwise noted.		
R2		1K ohm P-type ½W	1
R31		680 ohm	1
R42,43, 44		1.2K ohm	3
R12,38		2.2K ohm	2
R24		2.7K ohm	1
R33,35, 37		3.9K ohm	3
R15,27, 29,30		10K ohm	4
R39,40, 41		12K ohm	3
R13,16, 25		15K ohm	3
R11,23, 34,36		22K ohm	4
R32		39K ohm	1
R14,19, 21,22		68K ohm	4
R17,20		100K ohm	2
R28		680K ohm	1
R26		2.2M ohm	1
OUTPUT P. C. B. ASS'Y			
79	141-4-280T-06600	P.C.B. Ass'y, Output	1
RL1	4-232T-06900	Relay	1
	4-240T-47675	Socket, 5p	1
D12		Diode DS442 X	1
VOLUME P. C. B. ASS'Y			
80	141-4-280T-06700	P.C.B. Ass'y, Volume	1
VR1	4-222T-96100	Variable Resistor	1
SPEED SWITCH P. C. B. ASS'Y			
81	141-4-280T-06800	P.C.B. Ass'y, Speed Switch 33/45	1
S3	4-238T-69300	Switch	1
	4-240T-47677	Socket, 7p	1
START SWITCH P. C. B. ASS'Y			
82	141-4-280T-06900	P.C.B. Ass'y, Start Switch	1
S4	4-238T-45700	Switch	1

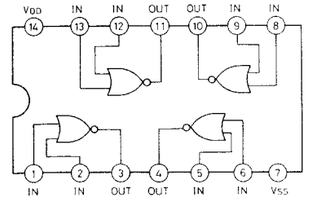
Ref. No.	Part No.	Description	Q'ty
LED P. C. B. ASS'Y			
83	141-4-280T-07000	P.C.B. Ass'y, LED	1
D21,22		LED SLP164B—50 A or B Red	2
SENSOR P. C. B. ASS'Y			
84	141-4-280T-13600	P.C.B. Ass'y, Sensor	1
	4-202T-50700	Photo Interrupter)or	1
	4-202T-50771	Photo Interrupter	
POWER AC P. C. B. ASS'Y			
85	141-4-280T-07100	P.C.B. Ass'y, Power AC	1
	141-2-382T-18900	Terminal	2
C2	4-223T-12100	Capacitor 0.01μF 400V	1
R1		FP-Carbon 6.8K ohm P-type ±5% ½W,	1
STROBO P. C. B. ASS'Y			
86	141-4-280T-07200	P.C.B. Ass'y, Strobo	1
	4-612T-07071	Lamp	1
POWER SWITCH P.C.B. ASS'Y			
87	141-4-280T-07300	P.C.B. Ass'y, Power Switch	1
S1	4-238T-30180	Power Switch	1
	141-2-135T-75700	Cover	1
C1	4-223T-12100	Capacitor, 0.01μF 400V	1

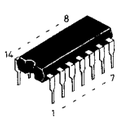
IC 4071B Quad 2—Input OR Gate



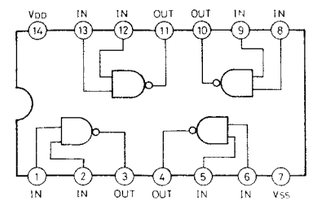


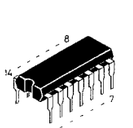
IC 4001B Quad 2— Input NOR Gate



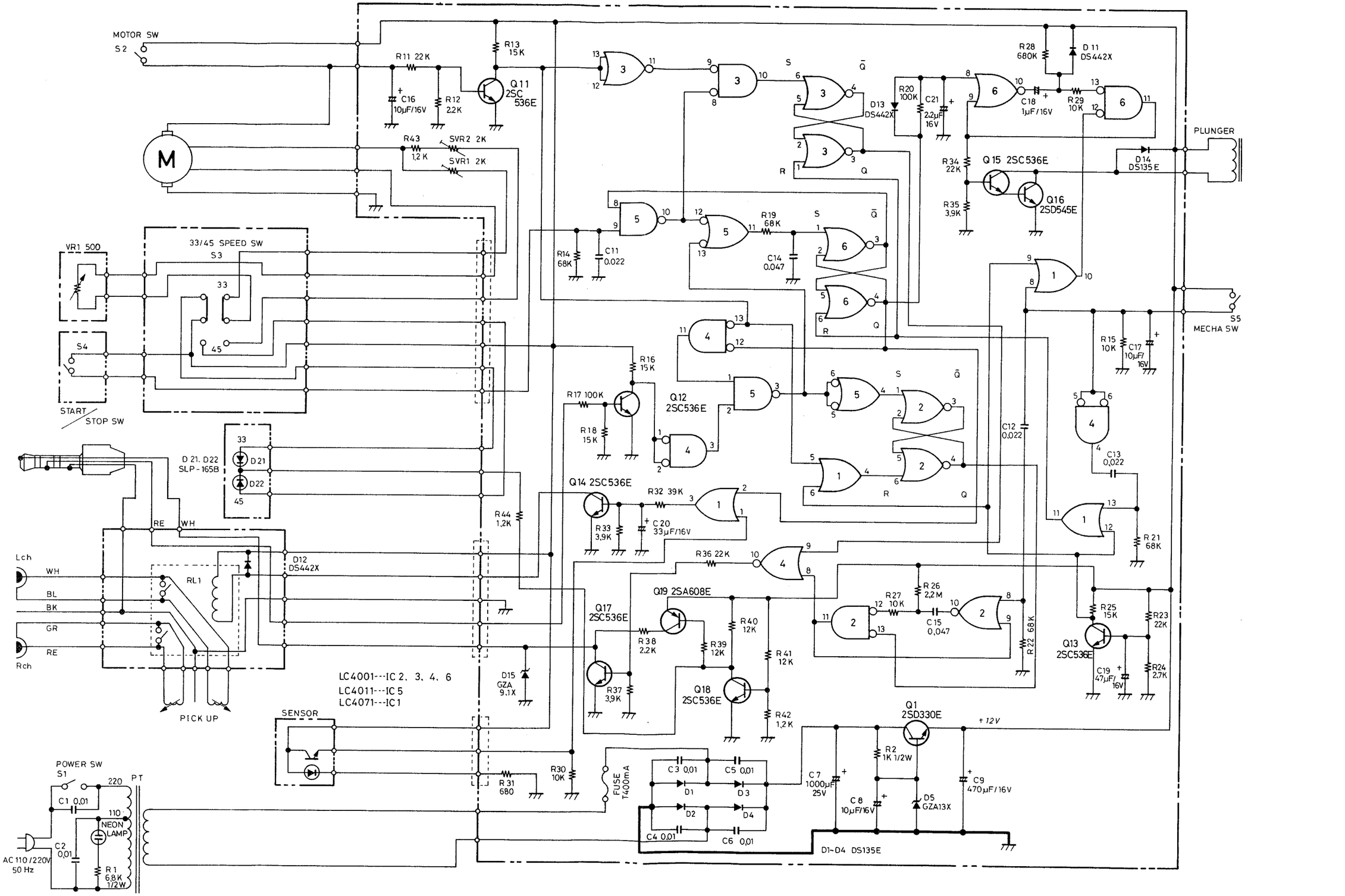


LC 4011B Quad 2— Input NAND Gate





SCHEMATIC DIAGRAM



SERVICE MANUAL

SANYO

JT 1400L BLACK
(EUROPE)

STEREO TUNER

This is a service manual for model JT1400L(Black) and only items changed from Model JT1400L are indicated. For other items, refer to service manual for Model JT 1400L(WM-10923).
These parts represents a non-interchangeable part.

Ref. No.	JT1400L	JT1400L(Black)	Description	Remark
	141-6-133T-48700	141-6-133T-48708	Individual Carton	
1	141-0-122T-49900	141-0-122T-49930	Front Panel Ass'y	
2	141-2-111T-54904	141-2-111T-54934	Cabinet	

Add this sheet to Model JT1400L service manual.

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